



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,495	05/10/2001	Yosuke Hosoya	09792909-5030	4893

26263 7590 11/29/2002

SONNENSCHN NATH & ROSENTHAL  
P.O. BOX 061080  
WACKER DRIVE STATION  
CHICAGO, IL 60606-1080

EXAMINER

WEINER, LAURA S

ART UNIT

PAPER NUMBER

1745

DATE MAILED: 11/29/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/852,495

Applicant(s)

HOSOYA, YOSUKE

Examiner

Laura S Weiner

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-13 and 16-20 is/are allowed.
- 6) ☒ Claim(s) 1-9, 14 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1745

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities: On page 11, last 2 lines, elements Si or Sn are not found in group 3B but these elements are instead in group 4A.

Appropriate correction is required.

### ***Claim Objections***

2. Claims 5 and 14 are objected to because of the following informalities: Sc, Y, etc. are found in Group 3B not Si or Sn which is supported in the specification. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. Claims 5-6 and 14-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 5 and 14 are rejected because it is unclear what is meant by "M is a typical element of the group 3B or a metal other than the group 4B excluding carbon" and "M' is one or more metal element other than the element Li" and "y, z are numerical values not less than 0". Also, it

Art Unit: 1745

is unclear because the compounds listed in the specification do not have Li present but from above z is supposed to be greater than 0 so should be present.

Claims 6 and 15 are rejected because it is unclear what is meant by “band-shaped...electrode”.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

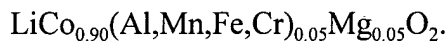
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 1745

5. Claims 1-4, 5, 7-9, are rejected under 35 U.S.C. 102(e) as being anticipated by Biensan et al. (6,071,645).

Biensan et al. teaches in column 2, line 65 to column 3, line 20, a lithium cell comprising a negative electrode comprising lithium metal, lithium alloys or carbons such as graphite, vitreous carbon, coke; a positive electrode and an electrolyte. Biensan et al. teaches in Example 8, that the electrolyte was a mixture of PC/EC/DMC. Biensan et al. teaches an electrode comprising  $\text{Li}_x\text{MyAmDzOt}$  where x can equal 1; M can be cobalt or nickel, A is magnesium or calcium and D is selected from groups 4b to 5a of the periodic table. Biensan et al. teaches in Example 7, that y can be 0.90, A can be Mg while m is 0.05 and z can be 0.05. Biensan et al. teaches in Table 1, column 5, that D can be Al, Mn, Fe or Cr. Therefore, Biensan et al. teaches



#### *Allowable Subject Matter*

6. Claims 10-13, 16-20 are allowed.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

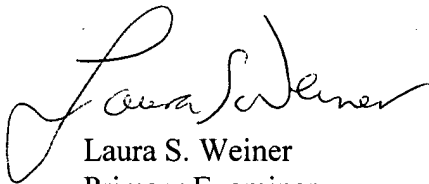
Peres et al. (6,274,272) teaches an active cathode material for a lithium cell in the form of lithium-containing nickel oxide substituted by three elements including at least cobalt and aluminum having the formula  $\text{Li}_L\text{Ni}_{(1-C-A-M)}\text{Co}_C\text{Al}_A\text{Mg}_M\text{O}_2$ .

Art Unit: 1745

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Weiner whose telephone number is (703) 308-4396. The examiner works a flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached at (703) 308-2383. The fax phone number for non-after finals is 703-872-9310 and the fax phone number for after-finals is 703-872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

A handwritten signature in cursive script that reads "Laura S. Weiner". The signature is written in dark ink and is positioned to the left of the printed name and title.

Laura S. Weiner  
Primary Examiner  
Art Unit 1745  
November 25, 2002